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3. Key to subgenera and unnamed groups of subgeneric level of the genus *Chrysolina*

(information on the distribution of any subgenus refers to this taxon completely, not only to the respective couplet)

1(115) Hind wings well-developed, broad, as long as elytra or longer.

2(40) Elytra entirely or partly rufous, with or without metallic reflection.

3(21) Elytra entirely rufous, with bronze reflection or without it.

4(10) Elytra with punctures arranged in distinct regular rows.

5(6, 7) Subgenus from Central and S Africa. Body hemispherical; head and pronotum dark metallic; pronotum very convex, broadest basally, rounded laterally, without lateral impressions, covered by large dense punctures laterally; elytral epipleura visible along entire length in lateral view, with interior border bearing setae along entire length; tarsi with entire sole, moderately broadened in male, narrow in female; pygidium with furrow along entire length.

Atechna Chevrolat, 1833, in part.

6(5, 7) Species from Kalimantan Isl. Body convex; head and pronotum green; pronotum moderately convex, with convex lateral calli separated from disc along entire length by wide impressions filled by moderately large punctures; elytral epipleura visible along entire length in lateral view, with interior border bearing setae apically; tarsomeres 1–3 with entire sole, narrow in both sexes; pygidium with impression in basal ½ only.

Ch. (*kinabaluensis*) species group.

7(5, 6) Palaearctic subgenera.

8(9) Body weakly or moderately convex in lateral view. Pronotal lateral impression distinct along entire length, or narrow, furrow-shaped basally. Head and pronotum black. In female, hind tarsomere 1 with narrow glabrous stripe in basal ½.

Taeniosticha Motschulsky, 1860, in part. Europe, Asia eastward till Sayans and W China.

9(8) Body very convex in lateral view. Pronotal lateral impression absent or very shallow, short, developed only near base. Head and pronotum dark metallic or black. Hind tarsomere 1 with entire sole in both sexes.

Palaeosticta Bechyné, 1952a. S-W Europe, N Africa, Near East.

10(4) Elytra with puncturation confused or with puncture rows hardly visible among confused puncturation.

11(18) Pronotum dark or bright metallic or black, elytra rufous.
12(15) Elytral epipleura posterior to middle oblique, visible along entire length in lateral view.
13(14) Elytra with punctures wholly confused, homogenous. Pronotal lateral impressions moderately deep, filled with large, partly coalescent punctures.
Erythrochrysa Bechyné, 1950a. Palaearctic.
14(13) Elytra with double puncturation: large punctures arranged in double rows which hardly visible among small confused punctures. Pronotal lateral impressions very shallow basally, and mostly absent apically.
Allohypericia Bechyné, 1950a, in part. Asia, N America.
15(12) Elytral epipleura posterior to middle horizontal and invisible in lateral view here.
16(17) Subgenus from Mediterranean basin. Head and pronotum green, golden green, coppery, blue, or violet; pronotum laterally with distinct or shallow impression filled with large punctures on entire length, or with only punctures and without impression; elytra covered by fine punctures.
Melasomoptera Bechyné, 1950a.
17(16) Subgenus from Oriental region. Head and pronotum blue or bronze; pronotum without lateral impressions, with only numerous large punctures laterally.
Pierryvettia Bechyné, 1950a, in part.
18(11) Pronotum and elytra of the same color, rufous.
19(20) Pronotum with straight lateral sides and deep lateral furrows along entire length. Last maxillary palpomere as broad as penultimate. Pygidium with sharp longitudinal furrow along entire length.
Sulcicollis J.Sahlberg, 1913, in part. Europe, Near East, Caucasus.
20(19) Pronotum with more or less rounded lateral sides and wide, shallow to moderately deep lateral impressions along entire length. Last maxillary palpomere broader than penultimate. Pygidium with longitudinal impression but without sharp furrow.
Chrysolina s.str. Motschulsky, 1860a, in part. Holarctic region.
21(3) Elytra dark with rufous lateral stripe, or rufous with black sutural stripe, or partly rufous (with rufous pattern on dark background and otherwise).
22(23) Elytra with rounded smooth spots arranged in regular rows and with densely confusedly punctate background. Elytra rufous with black suture and smooth spots, or elytra dark margined with rufous.
Lithopteroides Strand, 1935, in part. E Palaearctic and Oriental regions.
23(22) Elytra without rounded smooth spots.
24(33) Palaearctic subgenera.
25(28) Last maxillary palpomere broader than penultimate one. Pygidium with longitudinal furrow along entire length.
26(27) Elytra black or dark blue, with rufous lateral stripe not projecting along base and not reaching scutellum, or elytra rufous with black spots

including punctures. Elytral punctures larger, visible without magnification.

Stichoptera Motschulsky, 1860a, in part. Palaearctic region.

27(26) Elytra dark, usually with rufous lateral stripe projecting along base and reaching scutellum; in one species elytral lateral stripe not projecting along base, in this case aedeagus parallel-sided, without apical denticles at ventral side. Elytral punctures smaller, invisible without magnification.

Zeugotaenia Motschulsky, 1860a, in part. Palaearctic region.

28(25) Last maxillary palpomere not broader than penultimate.

29(30) Pronotum with straight lateral sides, convergent anteriorly. Elytra with puncturation confused, rufous with black sutural stripe broadened at base, scutellum black.

Allochrysolina Bechyné, 1950a, in part. W Europe, N Africa.

30(29) Pronotum with lateral sides more or less rounded at least in apical ½. Elytra with regular puncture rows.

31(32) Aedeagus usually apically drawn out or bearing narrow apical projection (long or short), usually twice or thrice curved in lateral view, rarely aedeagus rounded apically, in this case it always thrice curved in lateral view.

Chalcoidea Motschulsky, 1860a, in part. Palaearctic, Nearctic, and Oriental regions.

32(31) Aedeagus rounded apically, evenly arc-shaped in lateral view.

Diachalcoidea Bechyné, 1955b, in part. Ethiopia, Libya, Near East, Iran, Afghanistan, Kazakhstan, Central Asia.

33(24) Subgenera from Central and S Africa.

34(35) Elytra rufous with dark asymmetrical pattern, or metallic with rufous lateral stripe with uneven interior border.

Naluhia Bechyné, 1948a. C, E, S Africa.

35(34) Elytra rufous with dark symmetrical pattern (stripes, spots).

36(37) Elytral epipleura posterior to middle oblique, visible along entire length in lateral view, with setae along entire length. Elytra never with rounded yellow spots.

Atechna Chevrolat, 1833, in part. C and S Africa.

37(36) Elytral epipleura posterior to middle horizontal and invisible in lateral view here.

38(39) Pronotum with numerous, dense large punctures in lateral ¼, and with moderately large punctures at disc. Elytral epipleura in all but one species (*Ch. duodecimguttata*) with setae apically only.

Chersomela Weise, 1914, in part. C., S Africa, 1 species was introduced in Australia.

39(38) Pronotum with sparse, fine or moderately large punctures in lateral ¼, with disc smooth, covered by sparse, very fine punctures. Elytral epipleura with setae along entire length.

Polystictella Bechyné, 1952a, in part. C, E, S Africa.

40(2) Elytra entirely metallic (only in *Ch. aeruginosa aeruginosa* ab*. dimidiata* with large rufous spot at elytral apex).

41(74) Elytra with distict regular puncture rows.
42(49) Hind tarsomere 1 with glabrous stripe along entire length on underside, at least in female.
43(44) Pronotal lateral impression present along entire length, narrow, deep, with vertical outer border, filled with partly coalescent punctures.
Bittotaenia Motschulsky, 1860a. Europe, Mediterranean basin, Asia till India eastward.
44(43) Pronotum laterally with impression of different shape, but never with narrow furrow along entire length.
45(46) Last maxillary palpomere elongate.
Chalcoidea Motschulsky, 1860a, in part. Palaearctic, Nearctic, and Oriental regions.
46(45) Last maxillary palpomere as long as wide.
47(48) Body usually larger (8.8–11.0 mm long). Elytral punctures, forming longitudinal rows, are larger, usually differ in color from background. Aedeagus pointed apically.
Centoptera Motschulsky, 1860a, in part. Mediterranean basin, Canary Isls., S Africa.
48(47) Body usually smaller (4.3–9.4 mm). Elytral punctures, forming longitudinal rows, are smaller, not differ in color from background. Species from Central and E Asia, N America.
Allohypericia Bechyné, 1950a, in part. Asia, N America.
49(42) Tarsomeres 1–3 with entire sole in both sexes.
50(61) Pronotum without lateral impressions, with or without large punctures laterally.
51(56) Subgenera from C and S Africa.
52(53) Body very convex, hemispheric in lateral view. Dorsum metallic. Elytra covered by regular rows forming by large, foveiform punctures.
Ghesquiereita Bechyné, 1950c, in part. C Africa.
53(52) Body weakly or moderately convex in lateral view. Elytra covered by regular rows consisting of fine or moderately large punctures.
54(55) Pygidium without distinct furrow in apical ½. On elytra, narrow intervals between puncture rows are red or purple, broad ones are green or golden green. In male, last abdominal sternite evenly convex.
Taeniochrysea Bechyné, 1950a, in part. Europe, Africa.
55(54) Pygidium with furrow along entire length. Elytra unicolorous, bronze. In male, last abdominal sternite longitudinally impressed along entire length.
Chersomela Weise, 1914, in part. C, S Africa, 1 species was introduced in Australia.
56(51) Palaearctic subgenera.
57(60) Elytral epipleura invisible in lateral view at least, in apical ½.
58(59) Dorsum coppery or olive-green, unicolorous. Elytral rows consist of sparse punctures. Elytral epipleura invisible along entire length in lateral view.
Chrysolinopsis Bechyné, 1950a. Canary Isls., Madeira.

59(58) Pronotum two- or three-colored; on elytra narrow intervals between puncture rows are bluish green, and broad intervals golden red; or narrow intervals (or only punctures) purple, and broad intervals green or blue. Elytral rows consist of very dense punctures. Elytral epipleura slightly visible in anterior ½ in lateral view.

Taeniochrysea Bechyné, 1950a, in part. Europe, Africa.

60(57) Elytral epipleura visible in lateral view along entire length. Antenna and legs dark metallic or black. Aedeagus in lateral view semi-lyriform, thick apically.

Ovosoma Motschulsky, 1860, in part. Europe, Near East, Caucasus, Kazakhstan, Urals, Altai.

61(50) Pronotum with lateral impressions developed at least basally.

62(67) Pygidium with sharp furrow along entire length.

63(64, 65, 66) Pronotum always with only short narrow lateral furrows near base, anteriorly with large punctures but without any impression laterally. Aedeagus narrow, tube-shaped; flagellum exposed, simple or complicated apically.

Hypericia Bedel, 1899 . Palaearctic, 2 species was introduced in N America, S Africa, and Australia.

64(63, 65, 66) Pronotum with lateral impressions of different shape. Aedeagus in lateral view semi-lyriform, thick; flagellum invisible.

Ovosoma Motschulsky, 1860, in part. Europe, Near East, Caucasus, Kazakhstan, Urals, Altai.

65(63, 64, 66) Pronotum always with narrow lateral furrow along entire length. Aedeagus broad, depressed; flagellum narrow, simple, exposed.

Sulcicollis J.Sahlberg, 1913, in part. Europe, Near East, Caucasus.

66(63, 64, 65) Pronotum along entire length with broad, shallow lateral impressions (deepened basally), which covered by dense large punctures. Aedeagus broad, depressed, strongly curved in lateral view, bearing 2 fine denticles apically on ventral side; flagellum narrow, simple, exposed.

Stichoptera Motschulsky, 1860a, in part. Palaearctic region.

67(62) Pygidium without sharp furrow along entire length, with shallow broad impression or without it.

68(69) Pronotum with straight lateral sides.

Allochrysolina Bechyné, 1950a, in part. W Europe, N Africa.

69(68) Pronotum with arc-shaped lateral sides.

70(73) Species from Canary Isls.

71(72) Pronotum broadest basally, with lateral sides almost parallel near base and roundly convergent anteriorly. Antennae and legs dark metallic. Basal fold of prosternum distinct. Apical ⅓ of elytral epipleura horizontal and invisible in lateral view.

Rhyssoloma Wollaston, 1854, in part. Canary Isls.

72(71) Pronotum evenly and gradually attenuated from base to apex. Antennae and legs bright rufous. Basal fold of prosternum absent. Elytral epipleura inclined outside, well visible along entire length in lateral view.

Ch. (*fortunata*) species group. Canary Isls.

73(70) Species from Vietnam, S-W China, and Myanmar.
Ch. (*dohertyi*) species group.
74(41) Elytra with punctures entirely confused or arranged in rows which hardly visible among confused punctures.
75(76) Metasternum immarginate anteriorly between hind coxae. Head purple with 2 green spots at vertex, pronotum green medially and purple laterally, elytra coppery. Pronotum laterally without impressions, with numerous large punctures.
Paramenthastriella Daccordi, 1980b. E Africa.
76(75) Metasternum entirely marginated anteriorly.
77(92) Pygidium convex, without impression, or with only shallow impression.
78(81) Pygidium without any impression.
79(80) Claw tarsomere with 2 apical denticles beneath.
Fastuolina Warchałowski, 1991. Europe, Caucasus, Kazakhstan, Siberia, Afghanistan, Asia Minor.
80(79) Claw tarsomere without apical denticles.
Euchrysolina Bechyné, 1950a. Palaearctic region.
81(78) Pygidium with shallow impression, at least in apical ½.
82(83) Pronotum with straight lateral sides.
Allochrysolina Bechyné, 1950a, in part. W Europe, N Africa.
83(82) Pronotum with arc-shaped lateral sides, at least in anterior ½.
84(87) Elytral epipleura in apical ½ horizontal and invisible in lateral view.
85(86) Palaearctic subgenus, eastward to Central Asia and W China.
Synerga Weise, 1900.
86(85) Subgenus from Oriental region.
Pierryvettia Bechyné, 1950a, in part.
87(84) Elytral epipleura in apical ½ oblique, visible in lateral view.
88(89) Pronotal lateral impression very shallow, visible only basally. Dorsum blue.
Allohypericia Bechyné, 1950a, in part. Asia, N America.
89(88) Pronotal lateral impression deep basally.
90(91) Pronotum and elytra usually with bright or obscure colored longitudinal stripes (red, blue, green, golden). Aedeagus strongly curved in lateral view, always without apical denticles. In female, last abdominal sternite evenly convex.
Chrysomorpha Motschulsky, 1860a. Palaearctic region.
91(90) Pronotum and elytra unicolorous or differently colored, but always without colored stripes. Aedeagus weakly curved in lateral view, in some species anchor-shaped apically. In female, last abdominal sternite usually more or less turned down apically.
Anopachys Motschulsky, 1860a, in part. Palaearctic and Oriental regions.
92(77) Pygidium with sharp furrow along entire length.
93(97) Pronotum with straight lateral sides. Tarsomeres 1–3 with entire sole in both sexes.

94(95, 96) Pronotum with shallow lateral impression basally. In male, fore-tarsomeres 1–3 moderately broad. Aedeagus narrow, long, curved, tube-shaped.

Allochrysolina Bechyné, 1950a, in part. W Europe, N Africa.

95(94, 96) Pronotum without lateral impression. In male, fore-tarsomeres 1–3 moderately broad. Aedeagus broad, very short, depressed, truncate apically.

Colaphodes Motschulsky, 1860a. Europe, Asia Minor.

96(94, 95) Pronotum with lateral impression of various shape. In male, fore-tarsomeres 1–3 very broad. Aedeagus large, broad, apically semi-lyriform in lateral view.

Ovosoma Motschulsky, 1860, in part. Europe, Near East, Caucasus, Kazakhstan, Urals, Altai.

97(93) Pronotum with rounded lateral sides, at least in apical ½; if lateral sides more or less straight, then female 1st tarsomere bearing glabrous stripe beneath.

98(99) Subgenus from C Africa.

Ghesquiereita Bechyné, 1950c, in part.

99(98) Palaearctic subgenera.

100(101) Elytra with rounded smooth spots arranged in regular rows and densely confusedly punctate background.

Lithopteroides Strand, 1935, in part.

101(100) Elytra without rounded smooth spots.

102(103) Tarsi rufous, tibiae and femora metallic. Dorsum violet, bronze, or green.

Colaphosoma Motschulsky, 1860a. Europe, Kazakhstan, Siberia.

103(102) Legs entirely metallic.

104(108) In male, fore tarsomeres 1–3 very broad.

105(106, 107) Aedeagus symmetrical, tube-shaped, narrow; flagellum broad, with lateral sides wrapped to the middle.

Bechynia Bourdonné, 1977, in part. S, S-E Europe.

106(105, 107) Aedeagus symmetrical, broad, semi-lyriform in lateral view; flagellum invisible.

Ovosoma Motschulsky, 1860a, in part. Europe, Near East, Caucasus, Kazakhstan, Urals, Altai.

107(105, 106) Aedeagus asymmetrical, broad; flagellum broad, lobate.

Paracrosita Daccordi, 1982b. Caucasus, Turkmenistan, Afghanistan, Iran.

108(104) In male, fore tarsomeres moderately broad or narrow.

109(110) Aedeagus with simple apex, without denticles or apical projection. In female, hind tarsomere 1 with glabrous stripe beneath.

Maenadochrysa Bechyné, 1950a, in part. S Europe, N Africa.

110(109) Aedeagus apically with denticles or projection. In female, hind tarsomere 1 entirely pubescent beneath.

111(112) Aedeagus with 2 denticles near apex ventrally. Body elongate, larger (7.6–9.8 mm long).

Stichoptera Motschulsky, 1860a, in part. Palaearctic region.

112(111) Aedeagus with apical hook or projection. Body oval, smaller (4.0–6.4 mm long).

113(114) Aedeagus tube-shaped, with apical hook on ventral side. Anterior margin of pronotum without setae. Elytra with punctures wholly confused. Dorsum green, blue, coppery, or bronze.

Sphaeromela Bedel, 1899. Europe, Siberia.

114(113) Aedeagus strongly depressed, with triangular apical projection. Anterior margin of pronotum with dense setae. Elytral disc with abbreviated, hardly visible puncture rows among confused punctures.

Ch. (*seriepunctata*) species group. Russian Far East (Amur reg., Primorsky Krai),Japan (Honshu), China (Hubei).

115(1) Hind wings absent or strongly reduced, mostly very short, usually not longer than ½ elytron, if hind wings longer, reaching at most the base of pygidium, then they narrow.

116(187) Elytra with distinct puncture rows and flat or convex intervals. In some cases, regular rows are scarcely traced if they consist of very sparse punctures.

117(141) Pronotal lateral impression absent or obsolete; this impression sometimes more distinct in the subgenera from C and S Africa, but always shallow.

118(125) Subgenera from C and S Africa.

191(124) Dorsum entirely metallic, at least with metallic reflection, but always without distinct nonmetallic spots.

120(123) Subgenera from C Africa. Prothoracic hypomeron without basal fold.

121(122) Body very convex, broad, with pronotum very convex (viewed from the front). Antennae and legs black or dark metallic. Apex of aedeagus different, but never bearing narrow, long apical process. Elytral epipleura inclined outside, visible along entire length in lateral view. Pronotum without lateral impressions or with only obsolete impressions.

Ghesquiereita Bechyné, 1950c, in part. Central Africa.

122(121) Body weakly convex, oval. Antennae and legs rufous. Aedeagus with narrow, long apical process. Elytral epipleura almost horizontal in apical ½, invisible there in lateral view.

Omolina Weise, 1909. Tanzania.

123(120) Species from S Africa. Body less convex, more elongate, pronotum less convex (viewed from the front). Pronotum with broad, shallow lateral impressions. Prothoracic hypomeron with strong basal fold.

Centoptera Motschulsky, 1860a, in part.

124(119) Dorsum with nonmetallic spots.

Polystictella Bechyné, 1952a, in part. C, E, S Africa.

125(118) Subgenera from N Africa, Europe and Asia.

126(127) Subgenera from Pyrenees and N Africa. Body very convex, shining, dorsum green or reddish, with strong greenish tint, antennae and tarsi rufous; pronotum convex from side to side, with numerous large punctures laterally; elytra without humeral calli, with regular rows of

strong punctures. Aedeagus strongly flattened, more or less curved in lateral view.

Atlasiana Bourdonné et Doguet, 1991, in part. N Africa, Atlantic Pyrenees.

127(126) Subgenera from Asia including Caucasus.

128(131) Pygidium with sharp longitudinal furrow along entire length.

129(130) Species from C Asia.

Pezocrosita Jacobson, 1901a, in part (*Ch*. (*brevilata*) species group). Kazakhstan, C Asia, N-W China.

130(129) Subgenus from China (Sichuan, Yunnan).

Timarchomela Achard, 1922, in part.

131(128) Pygidium without sharp furrow.

132(133, 134) Species from Caucasus.

Atlasiana Bourdonné et Doguet, 1991, in part.

133(132, 134) Subgenus from Altai and Sayans.

Sibiriella L.Medvedev, 1999a, in part.

134(132, 133) Species from China.

135(140) Last maxillary palpomere broader, than penultimate one, or as wide as the latter or almost so, as long as penultimate one or slightly longer than latter.

136(137) Tarsomere 1 with long narrow glabrous basal "heel".
Pezocrosita Jacobson, 1901a (*Ch*. (*altimontana*) species group), in part. China (Qinghai, N-W Sichuan).
137(136) Tarsomere 1 without long narrow glabrous basal "heel".
138(139) Aedeagus broadly anchor-shaped at apex. China: (SE Gansu, Sichuan, Tibet).
Ch. (*tani*) species group.
139(138) Aedeagus different, but never broadly anchor-shaped at apex. China (Yunnan, Sichuan, Gansu).
Timarchomela Achard, 1922, in part.
140(135) Last maxillary palpomere short, broader than long, slightly narrower and distinctly shorter than penultimate one. China (Jiangxi).
Ch. (*pieli*) species group.
141(117) Pronotal lateral impression distinct. Subgenera from Palaearctic and Oriental regions.
142(169) Last maxillary palpomere elongate.
143(152) Pronotum laterally with shallow impression along entire length.
144(145) Elytra laterally with impression covered by irregular wrinkles. Body shining, green, elytra with golden reflection. Elytra (viewed from behind) very convex, roof-shaped, laterally steeply declivous. Hind wings narrow, reaching the base of pygidium.
Rhyssoloma Wollaston, 1854, in part. Madeira.
145(144) Elytra laterally without wrinkled impression.
146(147) Subgenus from Altai and Sayans.
Sibiriella L.Medvedev, 1999a, in part.
147(146) Taxa from China and Far East.
148(149) Aedeagus with small lobes (alae) at apical opening, without apical denticles.
Arctolina Kontkanen, 1959, in part. E Europe, N Asia, S Siberia, Kazakhstan, N-W China, N America.
149(148) Aedeagus without alae.
150(151) Aedeagus with apical denticles on ventral side, apically rounded, without alae. Species from N-W China.
Pezocrosita Jacobson, 1901a, in part (*Ch*. (*roborowskii*) species group).
151(150) Aedeagus of different shape. Species from Sichuan, Yunnan, Gansu.
Ch. (*zhongdiana*) species group + *Volosatik* Bieńkowski, in press now.
152(143) Pronotum laterally with deep impression at least near base, or with narrow furrow (shallow or deep).
153(156) Taxa from India, Sri Lanka, and Nepal.
154(155) Body in dorsal view with constriction laterally between pronotum and elytra. Pronotum much narrower than elytra. Body hemispheric in lateral view. Elytra rufous or metallic, unicolorous. Claw tarsomere with 2 apical denticles beneath.
Timarcholina Bechyné, 1950a, in part. India, Sri Lanka.
155(154) Body in dorsal view oval, without strong lateral constriction. Pronotum slightly narrower than elytra. Body moderately convex in

lateral view. Elytra blue or bronze, margined laterally and basally by rufous stripe. Claw tarsomere without denticles.

Ch. (*dhaulagirica*) species group. Nepal.

156(153) Taxa from Palaearctic except Nepal.

157(160) Pronotum usually with broad lateral impression; if pronotum with lateral furrow, then this furrow shallow.

158(159) Aedeagus with narrow apical projection.
Chalcoidea Motschulsky, 1860a, in part. Palaearctic, Nearctic, and Oriental regions.
159(158) Aedeagus apically pointed or rounded, without narrow projection.
Pezocrosita Jacobson, 1901a (*Ch*. (*altimontana*) species group, in part, and *Ch*. (*obovata*) species group). Central Asia, N-W China.
160(157) Pronotum with narrow deep lateral furrow, at least basally.
161(162) Species from N Africa (Morocco). Dorsum bronze, elytra laterally, antennae, and tarsi rufous. In male, last abdominal sternite evenly convex.
Upseleatlasia Bourdonné, 2012.
162(161) Subgenera from E Europe and Asia.
163(164) Dorsum metallic. In male last abdominal sternite convex or weakly depressed, but without narrow longitudinal furrow. Aedeagus with small lobes (alae) at apical opening.
Arctolina Kontkanen, 1959, in part.
E Europe, N Asia, S Siberia, Kazakhstan, N-W China, N America.
164(163) Dorsum entirely metallic, or with elytra margined by rufous, or with elytra mostly rufous. Aedeagus without alae.
165(168) Pygidium without groove.
166(167) Apex of aedeagus narrowly drawn out. N Urals, C Kazakhstan, Sayans, Buryatia, N Mongolia.
Pezocrosita Jacobson, 1901a, in part: *Ch*. (*sahlbergiana*) species group.
167(166) Apex of aedeagus of various shapes. Yunnan, Sichuan, Gansu.
Ch. (*zhongdiana*) species group.
168(165) Pygidium with distinct longitudinal groove in apical ½. Apex of aedeagus triangular, rounded, or truncate, not drawn out.
Jeanclaudia Mikhailov, 2009. Kazakhstan, Yakutia, E European Russia, Siberia.
169(142) Last maxillary palpomere as broad as long or almost so.
170(175) Pronotum with broad shallow lateral impression.
171(172) Elytral puncture rows slightly irregular, closely paired, and pairs of rows separated from each other by convex intervals.
Timarchoptera Motschulsky, 1860a, in part. Altai, Sayans, N Mongolia.
172(171) Elytra with regular puncture rows placed at equal distances, if paired then not so closely.
173(174) Aedeagus without alae at apical opening. Subgenus from Altai and Sayans.
Sibiriella L.Medvedev, 1999a, in part.
174(173) Aedeagus with small alae at apical opening. Species from China (Xinjiang), Chukot Penins., and Okhotsk Sea shore.
Arctolina Kontkanen, 1959, in part.
175(170) Pronotum with lateral impression deep, at least basally.
176(177) Each elytron with 7 entire puncture rows. Abbreviated sutural puncture row absent.
Semenowia Weise, 1889a. China (Tibet, Gansu).

177(176) Each elytron with 9 entire puncture rows and with or without abbreviated sutural row. If elytral rows partly confused, then elytra black margined with red laterally.

178(179) Pronotal lateral impression not forming narrow deep furrow basally.
Allohypericia Bechyné, 1950a, in part. Asia, N America.

179(178) Pronotum with narrow deep lateral furrow basally.

180(183) Aedeagus with lobes (alae) at apical opening. Dorsum entirely metallic or black in all but one species, *Ch.* (*Pleurosticha*) *latimargo* in which elytra rufous or brown. Last abdominal sternite with narrow or broad transverse impression apically.

181(182) Aedeagus with large depressed or raised alae at apical opening.
Pleurosticha Motschulsky, 1860a. Urals, Palaearctic Asia, N America.

182(181) Aedeagus with small alae at apical opening.
Arctolina Kontkanen, 1959, in part. E Europe, N Asia, S Siberia, Kazakhstan, N-W China, N America.

183(180) Aedeagus without lobes (alae) at apical opening. Last abdominal sternite apically marginated, but without deep impression.

184(185, 186) Dorsum dark bronze. Aedeagus apically elongate triangular, narrowly drawn out, with 2 small longitudinal impressions near apex ventrally (visible in ventral or lateral view). Hind wings very narrow, but long, reaching the base of pygidium.
Hypochalcoidea Bourdonné, 2012. S Siberia, Mongolia.

185(184, 186) Head and pronotum dark metallic or black, elytra rufous or brown. Aedeagus apically rounded, without impressions near apex. Hind wings reduced, very short.
Taeniosticha Motschulsky, 1860a, in part. Europe, Asia eastward till Sayans and W China.

186(184, 185) Elytra lacquer-shiny, margined with red stripe laterally. Aedeagus evenly curved at apex in lateral view. Hind wings reduced, narrow, reaching base of pygidium.
Zeugotaenia Motschulsky, 1860a, in part (*Ch. jacobyi,* E China, Russian Far East).

187(116) Elytra without distinct puncture rows, with punctures confused or arranged in indistinct rows, which hardly visible among irregular puncturation.

188(195) Subgenera from C and S Africa.

189(190) Elytra with nonmetallic spotted pattern.
Polystictella Bechyné, 1952a, in part. C, E, S Africa.

190(189) Elytra without nonmetallic spotted pattern.

191(192) Head and pronotum dark metallic, elytra rufous. Claw tarsomere with 2 apical denticles ventrally.
Pseudotimarchomima Daccordi, 1980b. Tanzania.

192(191) Dorsum entirely metallic.

193(194) Elytral epipleura distinctly ciliate posteriorly. Flagellum of aedeagus simple, narrow, exposed. Claw tarsomere without denticles.
Ghesquiereita Bechyné, 1950c, in part. Central Africa.

194(193) Elytral epipleura almost without setae posteriorly. Flagellum of aedeagus folded in half, and its apex is wrapped back into the apical orifice of aedeagus. Claw tarsomere with 2 sharp small denticles on underside.

Liomela Weise, 1912. Tanzania.

195(188) Subgenera from Palaearctic and Oriental regions.

196(222) Subgenera from N Africa, Europe, and Caucasus.

197(209) Pygidium with sharp longitudinal furrow along entire length.

198(203) In female, hind tarsomere 1 with entire sole. Tibiae not angularly dilated apically.

199(200) In male, last abdominal sternite with longitudinal furrow or broad deep impression. Aedeagus narrow, tube-shaped; flagellum broad, with lateral sides wrapped to the middle.

Bechynia Bourdonné, 1977, in part. S, S-E Europe.

200(199) In male, last abdominal sternite evenly convex.

201(202) Aedeagus apically with paired denticles on ventral or lateral sides; flagellum narrow, simple.

Threnosoma Motschulsky, 1860a. C and S Europe, N Africa.

202(201) Aedeagus apically semi-lyriform in lateral view; flagellum invisible.

Ovosoma Motschulsky, 1860a, in part. Europe, Near East, Caucasus, Kazakhstan, Urals, Altai.

203(198) In female, hind tarsomere 1 with glabrous stripe along entire length beneath.

204(205) Tibiae angularly dilated apically. Dorsum finely densely punctate, dull, black with weak blue or violet reflection. Lateral callus of pronotum separated from disc by depression at base.

Cecchiniola Jacobson, 1908. Ukraine: Crimea (northern foothills of Crimean Mts.).

205(204) Tibiae not angularly dilated apically.

206(207, 208) In male, last maxillary palpomere much broader than penultimate, and much broader than last palpomere in female. In male, fore tarsomeres 1–3 weakly broadened. Aedeagus apically with denticles.

Ovostoma Motschulsky, 1860a. Europe.

207(206, 208) Last maxillary palpomere slightly broader than penultimate in male, and almost similar to the respective in female. In male, fore tarsomeres 1–3 very broadened. Aedeagus apically with long or short, more or less rectangular lobe.

Crositops Marseul, 1883, in part. E Europe, W Siberia, Kazakhstan.

208(206, 207) In male, last maxillary palpomere as wide as penultimate, similar in both sexes. In male, fore tarsomeres 1–3 moderately broadened. Aedeagus apically simple, rounded.

Maenadochrysa Bechyné, 1950a, in part. S Europe, N Africa.

209(197) Pygidium without sharp furrow, but with longitudinal impression mostly basally.

210(211) Interior border of elytral epipleura glabrous, without setae.

Timarchida Ganglbauer, 1897. Romania.

211(210) Interior border of elytral epipleura with setae apically.
212(221) Elytral puncturation double: coarse punctures mostly confused and partly arranged in rows, and numerous very fine punctures placed in interspaces.
213(214) Male last maxillary palpomere broad, securiform. Apex of aedeagus without denticles; flagellum simple, short. Male tarsomeres 1–3 slightly broadened. Species from Europe.
Chrysolina s.str. Motschulsky, 1860a, in part.
214(213) Last maxillary palpomere narrow, as wide as previous or almost so, similar in both sexes.
215(218) Apex of aedeagus with denticles beneath.
216(217) Flagellum of aedeagus simple, narrow. Last maxillary palpomere slightly broader than previous. Tarsomeres 1–3 narrow.
Colaphoptera Motschulsky, 1860a. W Europe, Crimea, Caucasus.
217(216) Flagellum of aedeagus broadened near apex. Last maxillary palpomere as wide as previous. Male tarsomeres 1–3 broadened.
Cyrtochrysolina Kippenberg, 2012a. Europe.
218(215) Apex of aedeagus without denticles beneath. Last maxillary palpomere narrow.
219(220) Aedeagus very large; flagellum very long, whip-shaped. Male tarsomeres 1–3 broadened.
Sphaerochrysolina Kippenberg, 2010. Europe.
220(219) Aedeagus of normal size; flagellum short, narrow. Male tarsomeres 1–3 slightly broadened.
Lopatinica Kippenberg, 2012c. Caucasus, Turkey.
221(212) Elytral puncturation confused throughout, all punctures sub equal.
Heliostola Motschulsky, 1860a. Alps, Carpathians.
222(196) Subgenera from India and Palaearctic Asia (including Nepal) except Caucasus.
223(239) Pygidium with sharp longitudinal furrow along entire length.
224(234) Pronotal lateral impression developed along entire length or, at least, basally, if pronotal impression is absent, then body black, elongate, parallel-sided.
225(228) Body oval, convex; metallic, rarely black. Elytral puncturation wholly confused or interrupted by longitudinal convex calli.
226(227) Aedeagus apically rounded or truncate, without apical lobe, with 2 denticles or tubercles at apex ventrally.
Chrysocrosita Bechyné, 1950a. Asia.
227(226) Aedeagus apically with lobe, without denticles or tubercles ventrally.
Crositops Marseul, 1883, in part. E Europe, W Siberia, Kazakhstan.
228(225) Body elongate, weakly or moderately convex. Elytra with hardly visible puncture rows among confused puncturation, at least in basal ½.
229(232, 233) Body black. Aedeagus long, without apical denticles, twice or thrice curved in lateral view.

230(231) Pronotum strongly ventricose, with deep constriction between pronotum and elytra dorsally (see in lateral view). Hind wings reduced, narrow, reaching the base of pygidium.
Pseudocrosita Lopatin, 1999. Central Asia.

231(230) Pronotum weakly convex, without constriction between pronotum and elytra dorsally (see in lateral view). Hind wings absent.
Gnathomela Jacobson, 1895. Central Asia.

232(229, 233) Body green or blue, elongate or oval. Aedeagus depressed, with apical denticles on ventral side; flagellum narrow, long.
Pezocrosita Jacobson, 1901a, in part (*Ch*. (*helenae*) species group, in part). Central Asia, N-W China.

233(229, 232) Elytra lacquer-shiny, margined with red stripe laterally. Aedeagus evenly curved at apex in lateral view.
Zeugotaenia Motschulsky, 1860a, in part (*Ch. jacobyi*, E China, Russian Far East).

234(224) Pronotal lateral impression absent.

235(238) Dorsum metallic. Last maxillary palpomere elongate.
Pezocrosita Jacobson, 1901a, in part (*Ch*. (*brevilata*) species group). Kazakhstan, Central Asia, N-W China.

236(237) Last maxillary palpomere elongate.
Pezocrosita Jacobson, 1901a, in part (*Ch*. (*brevilata*) species group). Kazakhstan, Central Asia, N-W China.

237(236) Last maxillary palpomere as long as broad or slightly broader than long, slightly shorter than previous palpomere, similar in both sexes.
Medvedevlevna Özdikmen, 2008, in part (*Ch. sergeyi,* S Gansu, Sichuan).

238(235) Elytra partly or entirely rufous. Last maxillary palpomere as long as wide.
Timarchoptera Motschulsky, 1860a, in part. Altai, Sayans, N Mongolia.

239(223) Pygidium without sharp furrow in apical ½.

240(241) Body rufous, pronotum with black basal stripe, each elytron with longitudinal black stripe.
Vittatochrysa Lopatin, 1977. Central Asia, N-W China.

241(240) Dorsum entirely metallic, black, or with red (brown) unicolorous elytra.

242(243) Head and pronotum metallic or black, elytra red or brown. Subgenus from India and Sri Lanka.
Timarcholina Bechyné, 1950a, in part.

243(242) Dorsum entirely metallic. Palaearctic subgenera.

244(245) Pronotal lateral furrow basally very deep, pronotal disc and lateral calli very ventricose. In female, hind tarsomere 1 with glabrous stripe beneath.
Pezocrosita Jacobson, 1901a, in part (*Ch*. (*convexicollis*) species group). S Siberia, Mongolia.

245(244) Pronotal disc and lateral calli convex but do not very ventricose.

246(252) Last maxillary palpomere elongate, 1.6–2.0 times longer than wide. Dorsum shining.

247(248, 251) Subgenus from Central Asia. Elongate, laterally constricted between pronotum and elytra, dorsum green, pronotum with broad lateral impression along entire length.
Pezocrosita Jacobson, 1901a, in part (*Ch*. (*cyanopurpurea*) species group, in part).

248(247, 251) Subgenera from E Siberia and Far East.

249(250) Pronotum much less constricted or even broadest basally, covered by less coarse punctures. In female, last abdominal sternite does not form "ovipositor".
Anopachys Motschulsky, 1860a, in part.

250(249) Pronotum cordiform, constricted basally, covered by coarse punctures. In female last abdominal sternite stretched and laterally squeezed forming "ovipositor", pygidium triangularly stretched at apex, covering the base of "ovipositor".
Apterosoma Motschulsky, 1860b. E Asia.

251(247, 248) Species from Nepal and Pakistan.
Ch. (*nagaja*) species group.

252(246) Last maxillary palpomere not more than 1.4 times longer than wide. Dorsum sericeous or dull.

253(260) Body smaller (6.6–9.7 mm long).

254(257) Pronotum with broad, declivous lateral impression along entire length.

255(256) Antennae long, projecting beyond hind coxae. Tien Shan, Xinjiang. Length 7.0–8.5 mm.
Pezocrosita Jacobson, 1901a, in part (*Ch*. (*cyanopurpurea*) species group, in part).

256(255) Antennae short, not projecting beyond hind coxae. Yunnan, Sichuan, Gansu.
Ch. (*zhongdiana*) species group, in part.

257(254) Pronotum without lateral impression or with obsolete impression basally only. Antennae short, do not projecting beyond hind coxae.

258(259) In male, last abdominal sternite evenly convex, broadly emarginated apically. Length 7.5–9.7 mm.
Medvedevlevna Özdikmen, 2008, in part. China (Sichuan, S Gansu).

259(258) In male, last abdominal sternite with longitudinal furrow, bisinuate apically. Length 6.6–7.2 mm.
Sibiriella L.Medvedev, 1999a, in part. Altai, Sayans.

260(253) Body larger (11.4–11.7 mm long). In male, 1st abdominal sternite anteriorly immarginate at middle and bearing triangular elevation between hind coxae; in female, 1st abdominal sternite entirely marginated anteriorly, simple, without elevation.
Pseudolithoptera L.Medvedev, 1970. Korea.